Dart Aerospace Ltd.

Date: Thursday, 01/05/2008 9:45:52 AM
User: Julie Lecocq

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services
Job Number : 38920
Estimate Number : 10530
P.O. Number :
This Issue : 01/05/2008 **S.O. No.** :
Prsht Rev. : NC
First Issue : / / **Type** : MACHINED PARTS
Previous Run : 38653
Written By :
Checked & Approved By : JLD 08.5.01
Comment : Est: I 02.10.02 Re-format; Change to Dwg Rev. D & incorporated D2572KJ

Drawing Name : SADDLE FITTING, FWD (OUTBOARD/INBOARD)
Part Number : D2571
Drawing Number : D2571 REV E
Project Number : N/A
Drawing Revision : E
Material :
Due Date : 10/05/2008 **Qty:** 8 **Um:** Each

Additional Product

Job Number:

Seq. #:	**Machine Or Operation:**	**Description :**
1.0	D6101007	Saddle Billet

Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)
7075-T7351 8.25X7.75X2.5
Make from D6101-007 billet for D2571
Ensure that grain is along 7.75" length
Batch No: B34875

SS 08/05/09

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1

PLD

Comment: HAAS CNC VERTICAL MACHINING #1
Program Batch No. SS Double check by: J.L

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets
2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets
3-Machine Step No 3 per Folio FA051 and inspect per attached Dimension Sheets
4-Deburr and remove all machining marks
5-Tumble to remove sharp edges.

SS 08/05/09

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE

Comment: CONVENTIONAL MILLING MACHINE
Machine keyway as per dwg D2571 & D2572

SS 08/05/15

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SS 08/05/13

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: P2571 PAR #: N/A Fault Category: Prod/Machined Parts NCR: [✓ Yes] No DQA: Date: 08/05/22

QA: N/C Closed: Date: 08/05/22

NCR: 38920		WORK ORDER NON-CONFORMANCE (NCR)						
			Corrective Action Section B					
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector
8/5/12	#23	Durring 3rd operation the SADDLE Pulled up and caused the SADDLE to twist. ~~appot~~ approximately 0.100" ~~#~~ on the Bore at the skid tube.	08/05/13	Adjust speed ~~at~~ to compensate for the 1" sgs Endmill Scrap and Destroy and Replace Qty (x1) B# B34875	08/05/22	J.L 08/05/22	08/05/13	08/05/13 08/05/13
		R.C. no slowed a speed for a agrasive endmill		~~Install note in fo.to for what speed sgs endmills are to be run at.~~ 08/05/13				

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevD

Date: Thursday, 01/05/2008 9:45:52 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services
Drawing Name: SADDLE FITTING, FWD (OUTBOARD/INBOARD)

Job Number: 38920
Part Number: D2571

Job Number:

Seq. #:	**Machine Or Operation:**	**Description :**
5.0	QC8	SECOND CHECK

Comment: SECOND CHECK
J.L 08/05/14

6.0	HAND FINISHING1	HAND FINISHING RESOURCE #1

(8)

Comment: HAND FINISHING RESOURCE #1
Acid etch and Alodine as per QSI 005 4.1
/ 08-05-20

7.0	POWDER COATING	POWDER COATING

M 107925
(8X)

Comment: POWDER COATING
Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME: 11:15
OVEN TEMPERATURE: 220°F
FINISH TIME: 11:45
08/05/20

8.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION

(8)

Comment: INSPECT POWDER COAT
08/05/20

9.0	PACKAGING 1	PACKAGING RESOURCE #1

Comment: PACKAGING RESOURCE #1
Identify and Stock
Location:______ S7432
8/8/21 (8)

10.0	QC21	FINAL INSPECTION/W/O RELEASE

08/05/22

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion
MF 08-05-22

Dart Aerospace Ltd

W/O:		**WORK ORDER CHANGES**					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

QA: N/C Closed: _____ **Date:** _________

NCR:		**WORK ORDER NON-CONFORMANCE (NCR)**						
			Corrective Action Section B					
DATE	**STEP**	**Description of NC** Section A	**Initial** Chief Eng	**Action Description** Chief Eng	**Sign & Date**	**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector

NOTE: Date & initial all entries

DART AEROSPACE LTD	**Work Order:**	38920	
Description: Saddle, Fwd Outboard	**Part Number:**	**D2571**	
Inspection Dwg: D2571 Rev. E		**Page 1 of 1**	

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	**Min**	**Max**	**Go/No Go Gauge**	**1**	**2**	**3**	**4**	**By**	**Date**
A	0.438	0.443		0.443	0.443	.441	.441		
B	1.745	1.755		1.749	1.750	1.750	1.750		
C	3.495	3.505		3.499	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.001	8.002	8.002	8.002		
F	0.490	0.510		0.504	0.505	.500	.505		
G	0.257	0.262		0.259	0.259	0.259	0.259		
H	0.375	0.380		0.378	0.378	0.378	0.378		
I	0.490	0.510		0.503	0.508	0.505	0.503		
J	1.174	1.184		1.179	1.179	1.179	1.178		
K	0.558	0.578		0.570	0.573	0.5715	0.572		
L	1.174	1.184		1.179	1.179	1.180	1.180		
M	1.490	1.500		1.495	1.495	1.495	1.494		
N	2.495	2.505		2.500	2.500	2.500	2.499		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		0.123	0.123	0.124	0.124		
Q	0.115	0.135		0.135	0.135	0.135	0.135		
R	0.240	0.260		0.248	0.248	0.248	0.249		
S	0.115	0.135		0.123	0.121	0.121	0.122		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	2.940	2.980		2.960	2.960	2.960	2.958		
V	0.230	0.250		0.232	0.231	0.232	0.232		
W	0.115	0.135		0.118	0.122	0.119	0.119		
X	0.308	0.313		.310	.310	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		0.365	0.366	.366	.362		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.627	0.629	0.626	.625		
AC	0.053	0.073		0.0625	0.0625	0.0625	.062		
AD	0.240	0.260		0.243	0.243	0.243	0.243		
AE	1.375	1.395		1.3880	1.3905	1.3905	1.3895		
AF	0.115	0.135		0.135	0.135	0.135	0.135		
AG	0.240	0.280		0.260	0.260	0.260	0.260		
AH	0.240	0.260		0.242	0.247	0.2425	0.242		
AI	2.000	2.020		2.0035	2.008	2.004	2.004		
AJ	0.023	0.043		.033	.033	.033	.033		
	Accept/Reject								

Measured by:	DJP	Audited by	JL
Date:	08/05/10	Date:	08/05/14

Rev	**Date**	**Change**	**Revised by**	**Approved**
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD		**Work Order:**	38920
Description: Saddle, Fwd Outboard		**Part Number:**	**D2571**
Inspection Dwg: D2571 Rev. E			**Page 1 of 1**

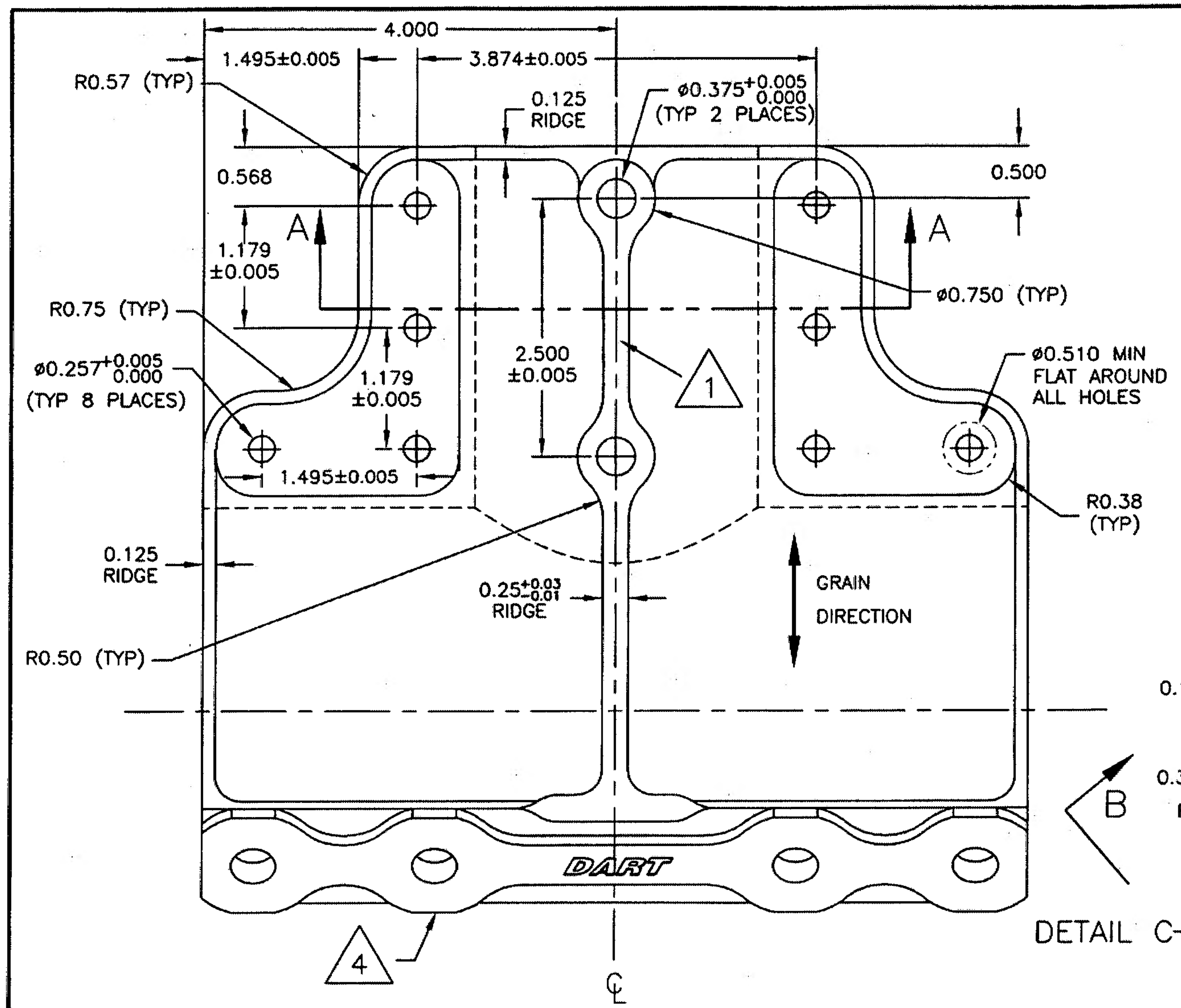
Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

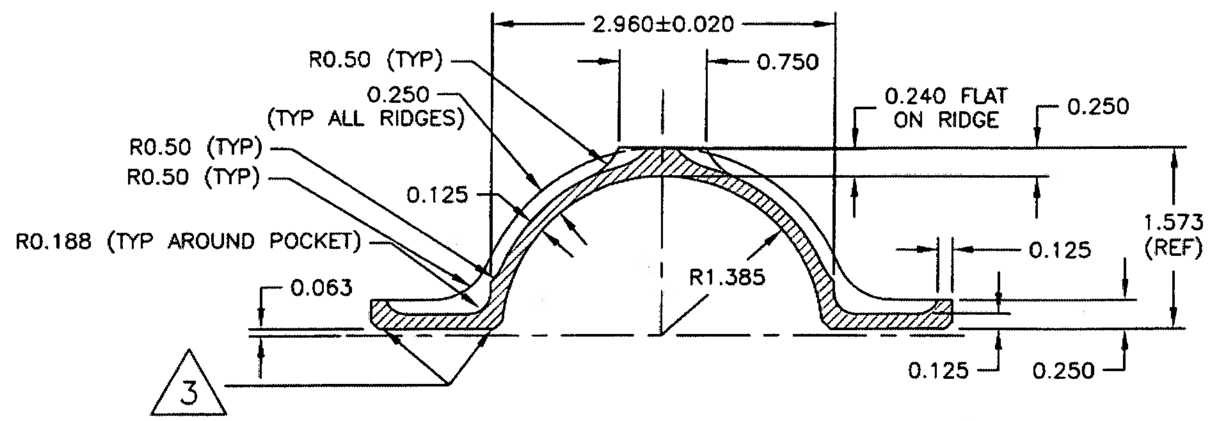
				Recorded Actual Dimensions					
Dim	**Min**	**Max**	**Go/No Go Gauge**	5	6	7	8	**By**	**Date**
A	0.438	0.443		.441	.441	.441	.441		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.7500	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.002	8.001		
F	0.490	0.510		.505	.502	.505	.505		
G	0.257	0.262		0.259	0.259	.258	.259		
H	0.375	0.380		0.378	0.378	.376	.377		
I	0.490	0.510		.505	.505	.500	.500		
J	1.174	1.184		1.179	1.177	1.177	1.179		
K	0.558	0.578		.568	.568	.568	.570		
L	1.174	1.184		1.178	1.78	1.179	1.179		
M	1.490	1.500		1.496	1.495	1.495	1.495		
N	2.495	2.505		2.499	2.499	2.500	2.500		
O	3.869	3.879		3.872	3.874	3.874	3.874		
P	0.115	0.135		0.123	0.12	.122	.122		
Q	0.115	0.135		0.135	0.135	.135	.135		
R	0.240	0.260		0.248	0.248	.248	.248		
S	0.115	0.135		.125	.125	.125	.122		
T	0.178	0.198		0.188	0.188	.188	.188		
U	2.940	2.980		2.958	2.960	2.960	2.980		
V	0.230	0.250		.233	.240	.236	.237		
W	0.115	0.135		.120	.120	.120	.121		
X	0.308	0.313		.310	.310	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.362	.365	.367	.361		
AA	0.470	0.530		0.500	0.500	.500	.500		
AB	0.615	0.635		.625	.625	625	.620		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.250	.250	.250	.250		
AE	1.375	1.395		1.385	.1.381	1.385	1.389		
AF	0.115	0.135		.125	.125	.125	.125		
AG	0.240	0.280		0.260	0.260	.260	.260		
AH	0.240	0.260		.250	.250	.245	.245		
AI	2.000	2.020		2.002	2.002	2.000	2.002		
AJ	0.023	0.043		.033	.033	.033	.		
Accept/Reject									

Measured by:	DJP / AJ	Audited by	J.L
Date:	08/05/11 / 14	Date:	08/05/14

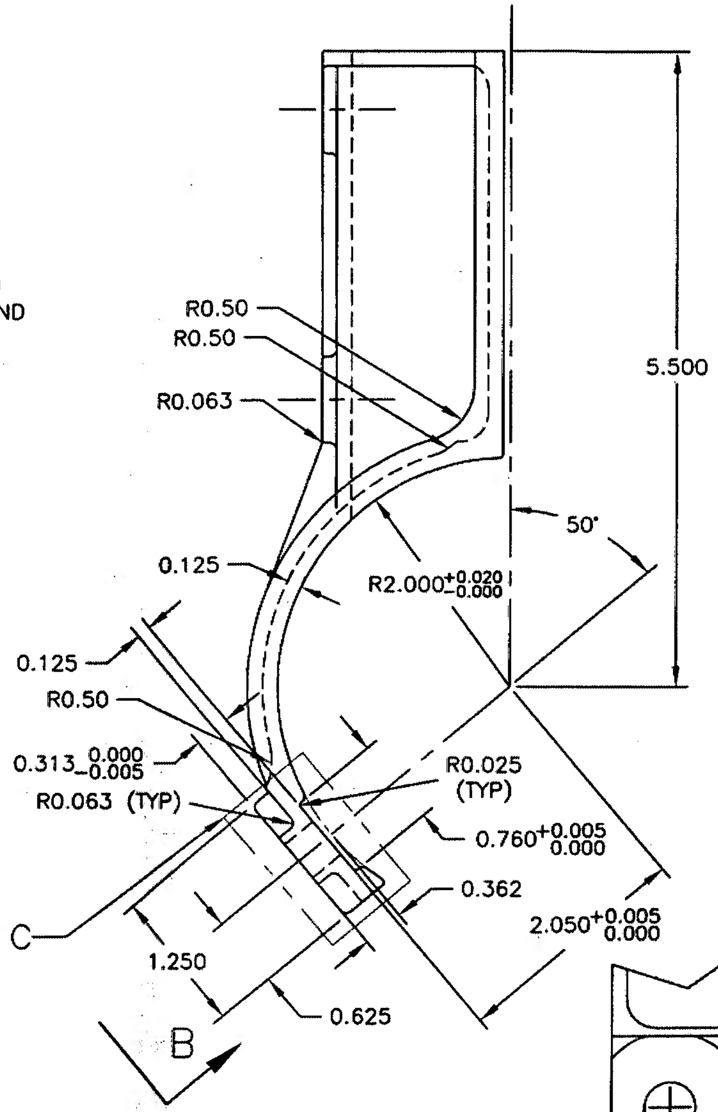
Rev	**Date**	**Change**	**Revised by**	**Approved**
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

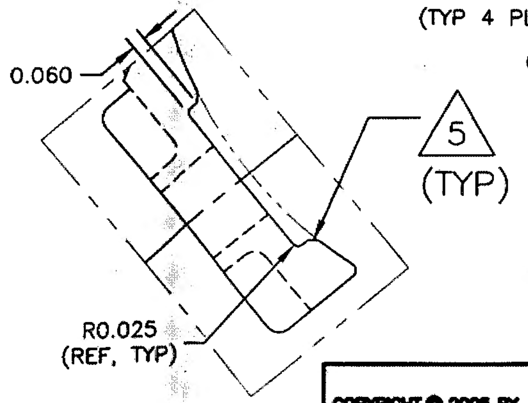
RELEASED
05.12.06





SECTION A–A





DETAIL C
SCALE 4:3

NOTES

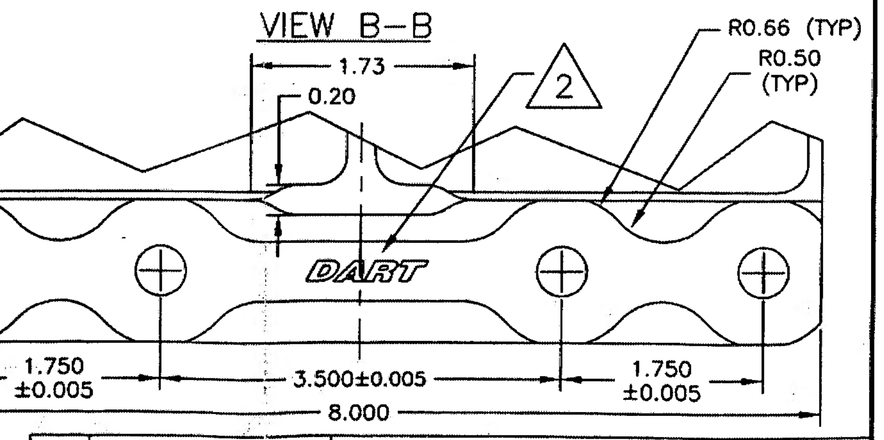
MATERIAL: 7075–T7351 (QQ–A–250/12) (REF DART SPEC. D6102–001)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

1	ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
2	ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125
3	CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
4	CHAMFER 0.063" x 45° ALL AROUND
5	CHAMFER 0.033" x 45° (SEE DETAIL C)

E

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 38920

VIEW B–B



E	05.07.13	ADD CHAMFER ON RIDGE, NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

DESIGN DS	DRAWN BY PH	DART — DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D2571 — REV. E — SHEET 1 OF 1
DATE 05.07.13		TITLE OUTER FWD SADDLE — SCALE 2:3